

Pulsarlube PL3 (High Speed Grease)

1. Identification

1) Product Name:: Pulsarlube PL3 (High Speed Grease)

2) Recommended use of the chemical and restrictions on use

A. Product description : An electrochemical automatic single point lubricator

B. Restrictions on use: Not available except the intended use of the product

3) Supplier's details

Pulsarlube USA, Inc,

Telephone Number for Information:

1170 Ardmor Ave, Tel.: +1 (847) 593-5300 Itasca IL 60143, USA Fax : +1 (847) 593-5303

info@pulsarlube.com

Emergency telephone number: Tel.: +1 (847) 593-5300

2. Hazard(s) identification

1) Classification of the substance or mixture GHS US classification

Hazardous to the aquatic environment – Chronic Hazard, Category 4 H413

May cause long lasting harmful effects to aquatic life.

Full text of H-statements: see section 16

2) GHS Label elements, including precautionary statements GHS US labelling

Hazard statements (GHS US) : H413 - May cause long lasting harmful effects to aquatic life.

Precautionary statements (GHS US) : P273 - Avoid release to the environment.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional,

national and/or international regulation.

3) Other hazards which do not result in classification

No additional information available

4) Unknown acute toxicity (GHS US)

No additional information available

3. Composition/information on ingredients

1) Substances

Not applicable

2) Mixtures



Name	Product identifier	%	GHS US classification
Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.]	CAS-No.: 64742-54-7	55 – 60	Carc. 1B, H350 Aquatic Chronic 4, H413
Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.]	CAS-No.: 64741-96-4	10 – 19	Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1B, H350 Aquatic Chronic 4, H413
Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).]	CAS-No.: 64742-57-0	10 – 15	Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1B, H350

Full text of hazard classes and H-statements : see section 16

4. First-aid measures

1) Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

2) Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation

after an excessive inhalation exposure. Although no

appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin

folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may

cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

3) Immediate medical attention and special treatment, if necessary

Treat symptomatically.

5. Fire-fighting measures

1) Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.



2) Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in : Toxic fumes may be released.

case of fire

,

3) Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location.

Do not enter fire area without proper protective equipment,

including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective

equipment. Self-contained breathing apparatus. Complete

protective clothing.

6. Accidental release measures

1) Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters.

Absorb spillage to prevent material damage.

1-1) For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

1-2) For emergency responders

Protective equipment : Do not attempt to take action without suitable protective

equipment. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel.

2) Environmental precautions

Avoid release to the environment.

3) Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and

cover without compressing it.

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

4) Reference to other sections

For further information refer to section 13.

7. Handling and storage

1) Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated

conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal

protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always

wash hands after handling the product.

2) Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store in a well-ventilated place. Keep cool.

Packaging materials

: Store always product in container of same material as original container.

8. Exposure controls/personal protection

1) Control parameters

No additional information available

2) Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station

Environmental exposure controls : Avoid release to the environment.

3) Individual protection measures/Personal protective equipment

Personal protective equipment : Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

4) Personal protective equipment symbol(s):



Odour





9. Physical and chemical properties

1) Information on basic physical and chemical properties

Physical state : Solid
Appearance : Paste
Colour : brown

Odour threshold : No data available pΗ : No data available Melting point : No data available Freezing point : Not applicable **Boiling point** : No data available Flash point : Not applicable Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : Approx. 0.89 at 20 °C

: Characteristic

Solubility : Insoluble

Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available



Explosive limits : Not applicable Explosive properties : No data available Oxidising properties : No data available

2) Other information

No additional information available

10. Stability and reactivity

1) Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

2) Chemical stability

Stable under normal conditions.

3) Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

4) Conditions to avoid

None under recommended storage and handling conditions (see section 7).

5) Incompatible materials

No additional information available

6) Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

11. Toxicological information

1) Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.] (64741-96-4)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	>
LD50 dermal rabbit	> 2000 mg/kg Source: IUCLID
LC50 Inhalation - Rat (Dust/Mist)	2.18 mg/l Source: IUCLID
ATE US (dust,mist)	2.18 mg/l/4h

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg Source: IUCLID

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)



LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 5000 mg/kg Source: ECHA
LD50 dermal	≥
LC50 Inhalation - Rat (Dust/Mist)	> 2.18 mg/l Source: ECHA
LC50 Inhalation - Rat (Vapours)	> mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.]

(64741-96-4)

125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline:

OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity

LOAEL (oral, rat, 90 days)	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

LOAEL (oral, rat, 90 days)

NOAEC (inhalation, rat, dust/mist/fume, 90 days)

NOAEC (inhalation, rat, dust/mist/fume, 90 days)

LOAEL (oral, rat, 90 days)

NOAEC (inhalation, rat, dust/mist/fume, 90 days)

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)

boiling above approximately 400 °C (752 °F).] (64742-57-0)					
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)				
LOAEL (dermal, rat/rabbit, 90 days)	≥ mg/kg bodyweight/day				
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	>				
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)				
NOAEC (inhalation, rat,	> 0.98 mg/l air Animal: rat, Guideline: OECD Guideline 412				
dust/mist/fume, 90 days)	(Subacute Inhalation Toxicity: 28-Day Study)				

Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a



viscosity of at least 100 SUS at 100°F (64741-96-4)	(19cSt at 40°C). It contains relatively few normal paraffins.]
Viscosity, kinematic	1.99 – 847 mm ² /s Temp.: '40°C' Parameter: 'mm ² /smm2/s '

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

Viscosity, kinematic

1.99 – 847 mm²/s Temp.: '40°C' Parameter: 'mm²/smm²/s mm²/s '

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)

Viscosity, kinematic 1.99 – 847 mm²/s Temp.: '40°C' Parameter: 'mm²/smm2/s '

Symptoms/effects after inhalation : Dust of the product, if present, may cause respiratory irritation

after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : None under normal conditions. Dust may cause irritation in skin

folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may

cause eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

12. Ecological information

1) Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor

to cause long-term adverse effects in the environment. May cause long lasting harmful effects to aquatic life.

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

LC50 - Other aquatic organisms [1]

2) Persistence and degradability

PL3, CENTOPLEX 41-300	
Persistence and degradability	Not rapidly degradable

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.] (64741-96-4)

Persistence and degradability Not rapidly degradable

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

Persistence and degradability Not rapidly degradable

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a



catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)

Persistence and degradability Not rapidly degradable

3) Bioaccumulative potential

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.] (64741-96-4)

Partition coefficient n-octanol/water

3.9 - 6 Source: IUCLID (Log Pow)

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

Partition coefficient n-octanol/water 3.9 - 6 Source: IUCLID (Log Pow)

4) Mobility in soil

No additional information available

5) Other adverse effects

No additional information available

13. Disposal considerations

1) Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed

collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal

recommendations

Additional information

Disposal must be done according to official regulations. : Do not re-use empty containers.

: Comply with applicable regulations for solid waste disposal.

14. Transport information

In accordance with DOT / TDG / IMDG / IATA

1) UN number

DOT NA No : Not applicable UN-No. (TDG) : Not applicable : Not applicable UN-No. (IMDG) UN-No. (IATA) : Not applicable

2) UN proper shipping name

Proper Shipping Name (DOT) : Not applicable Proper Shipping Name (TDG) : Not applicable Proper Shipping Name (IMDG) : Not applicable Proper Shipping Name (IATA) : Not applicable

3) Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable



IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA)

: Not applicable

4) Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

5) Environmental hazards

Other information : No supplementary information available.

6) Special precautions for user

DOT

Not applicable

TDG

Not applicable

IMDG

Not applicable

IATA

Not applicable

7) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

1) US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.]	64741-96-4	Present	Active	
Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.]	64742-54-7	Present	Active	
Residual oils (petroleum), hydrotreated; Baseoil—unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction	64742-57-0	Present	Active	

25	DS (Product Safety Data Sheet)		•	Rev 08
	with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately			

2) International regulations

400 °C (752 °F).]

CANADA

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.] (64741-96-4)

Listed on the Canadian DSL (Domestic Substances List)

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Distillates (petroleum), solvent-refined heavy naphthenic [A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100°F (19cSt at 40°C). It contains relatively few normal paraffins.] (64741-96-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Distillates (petroleum), hydrotreated heavy paraffinic [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Residual oils (petroleum), hydrotreated; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly greater than C25 and boiling above approximately 400 °C (752 °F).] (64742-57-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

3) US State regulations

No additional information available

16. OTHER INFORMATION

- 1) Source of the data
 - (1) Chemical manufacturer's information: SDS(SAFETY DATA SHEET) Data
 - (2) Chem Guide CAS DataBase
 - (3) Corporate Solution From Thomson Micromedex(http://csi.micromedex.com)



- (4) ECB-ESIS(European chemical Substances Information System)(http://ecb.jrc.it/esis)
- (5) ECOTOX Database, EPA(http://cfpub.epa.gov/ecotox)
- (6) IUCLID Chemical Data Sheet, EC-ECB
- (7) International Chemical Safety Cards(ICSC)(http://www.nihs.go.jp/ICSC)
- (8) TOXNET, U.S. National Library of Medicine(http://toxnet.nlm.nih.gov)
- (9) The Chemical Database, The Department of Chemistry at the University of Akron (http://ull.chemistry.uakron.edu/erd)
- (10) Korea Information System for Chemical Safety, KISChem (http:// http://kischem.nier.go.kr)
- (11) Chemical information system (http://ncis.nier.go.kr)
- (12) Grease Raw material manufacturer's information: PSDS(PRODUCT SAFETY DATA SHEET) Data
- 2) The first creation date: 2015.02.11
- 3) The number of times, and the final revision date: Revision times 08

The final revision date: 2025.07.08

Further information

Pulsarlube has prepared copyrighted Product Safety Datasheets to provide information on the different Pulsarlube automatic grease lubricator systems. As defined in above the text Pulsarlube automatic grease lubricator are manufactured articles, which do not result in exposure to a hazardous chemical under normal conditions of use. The information and recommendations set forth herein are made in good faith, for information only, and are believed to be accurate as of the date of preparation. However, Pulsarlube MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED. WITH RESPECT TO THIS INFORMATION AND DISCLAIMS ALL LIABILITY FROM REFERENCE ON IT.